

DISCHARGE FROM SEDIMENT CONTROL PONDS

Appropriate erosion and sediment control measures during land development and construction activities are important to minimise the amount of suspended soil particles in our waterways. Sediment in our waterways enters our creeks, lakes and rivers with a major impact on water quality, aquatic plants and animals.

During rain events, sediment control ponds and building footings on construction sites may fill with water and need to be emptied. There are requirements under the *Environment Protection Act 1997* (the Act) that you need to be aware of if you need to discharge water.

WHAT ARE THE REQUIREMENTS OF THE ENVIRONMENT PROTECTION ACT 1997?

Discharge from a sediment control pond (or building footing) is only allowed when the water pH is 6.5-8.5 and is clarified to below 60 mg/L (suspended solids) for urban areas. Contact the Environment Protection Authority (EPA) by calling 13 22 81 for advice on other areas in the ACT.

An easy and inexpensive way to measure the clarity of a water sample is by using a turbidity tube.

High turbidity readings (low clarity) can indicate erosion and sedimentation problems. Turbidity is measured in Nephelometric Turbidity Units (NTU's). The numbers on the side of a turbidity tube are in NTU's.

Based on the nature of most soil types in the ACT area, a measurement of 50 NTU's is comparable to 60mg/L for ACT EPA purposes. When more accurate results are required, you should send a water sample to a laboratory to test for suspended solids.

If the water is above 60 mg/L you can reduce the sediment to an acceptable discharge level by dosing the water with either gypsum or alum or similar product.

Dosing can take from several hours to overnight, depending on the water quality and the amount of water to be dosed.



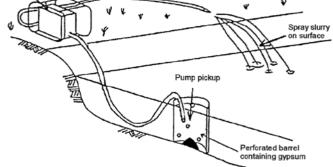
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You must manage the water so dosing and discharge can be achieved in a timely manner before the next rain event. Ideally you should keep the water catchment at 20% of capacity so you can catch the runoff from the next rain event.

You may pump the water to the stormwater system without breaching the Act when the water pH is 6.5-8.5 and clarified to at or below 60mg/L).

When discharging the clear water you must stabilise the pump so it cannot move and position it off the bottom of the pond/ footing to avoid pumping dirty water. You must supervise the pump at all times while pumping so if the water quality

changes you can stop pumping and carry out further dosing. You must check the water quality regularly during pumping to ensure the water quality remains less than 60 mg/L.



LEGAL REQUIREMENTS

Under the Act it is an offence for a person to discharge, or allow to discharge dirty water into the stormwater system. Breaches of the Act can lead to a fine of up to

\$200 for an individual and \$1,000 for a company. For more serious offences, penalties may exceed \$10,000.

If a pollution incident does occur, you must report the incident to the EPA immediately.

WHERE CAN I PURCHASE A TURBIDITY TUBE?

You can purchase a turbidity tube from the EPA by calling 13 22 81.

These transparent tubes are about 3cm in diameter, each section just under 34cm long. Converting the tube into two sections makes it easier to carry. The bottom of the tube is sealed off with a white plastic disk, across which three bold black lines are painted. The top tube is reduced in size over a length of about 3cm to provide a tight fit into the top of the lower tube. Only the bottom section is needed when the water is noticeably turbid.

TURBIDITY TUBE INSTRUCTIONS

- 1. Using a clean bucket or container, take a large sample of water from the pond or footing.
- 2. Pour water from the bucket/container into the tube until the image at the bottom of the tube is no longer visible when looking directly from the top of the tube into the bottom, through the water column.
- 3. Empty the tube slowly, checking frequently, until the black and white pattern can be seen clearly.
- 4. When the pattern can be seen clearly, read the number from the side of the tube and record the number. This number is the NTU reading.
- 5. Repeat the process again to ensure the measurement is accurate.

FOR MORE INFORMATION

Contact the EPA by calling 13 22 81 or email environment.protection@act.gov.au.

Go to www.accesscanberra.act.gov.au for other information relating to Building and Construction.

